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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,812	04/24/2001	Wilhelmus Hendrikus Alfonsus Bruls	PHNL 000592	5832

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER	
WONG, ALLEN C	

ART UNIT	PAPER NUMBER
2613	

DATE MAILED: 03/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/840,812	BRULS ET AL.	
	Examiner	Art Unit	
	Allen Wong	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 October 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,9 and 10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4,5,9 and 10* is/are rejected.

7)☒ Claim(s) *3 and 6* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *10/6/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 10/6/04 have been fully considered but they are not persuasive.

Since claims 7 and 8 are cancelled, the 35 U.S.C. 101 rejection is withdrawn.

Regarding lines 1-4 on page 7 of applicant's remarks, applicant argues that Tanaka fails to disclose a second quantization step size that is determined from the first quantization step size and the second quantization step size represents a second quality or bit rate that is lower than the bit rate associated with the first quantization step. The examiner respectfully disagrees. The claims are written as such that they merit a broad, reasonable interpretation in that Tanaka meets the broadly stated limitations. Tanaka's element 118 of fig.3 is a second quantization parameter. Further, Tanaka's col.15, lines 40-53, Qstep is the second quality for quantization of selected second frames and that, on lines 43-48, the second quality Qstep is lower than the first quality Qb because the first quality Qb is multiplied by a factor 1/4, ½ or 3/4 , thus making the second quality Qstep smaller or lower than the first quality Qb. Qstep is the quantization step size which has a direct relationship with the bit rate and the quality bit rate. Thus, Qstep has a direct relationship with the bit rate and the quality bit rate. Thus, Tanaka does disclose "a second quantization parameter representing a second quality or bit rate that is lower than said first quality bit rate".

And as far as the citation in column 5, line 64 to col.6, line 14, the purpose of Tanaka's invention is to calculate and use a second quantization step size to further

improve picture quality, not degrade picture quality. The main idea of an arrangement for compression and a compressing method is to compress in an accurate, effective, efficient manner because one would yearn for clear image data for viewing, not inaccurate images.

More importantly, Tanaka does meet the broadly claimed limitations of independent claim 1 because the quantization step size is directly related to the bit rate, as it is known in MPEG encoding standard, and that Tanaka does teach the second quantization step size that is determined from the first quantization step size and the second quantization step size represents a second quality or bit rate that is lower than the bit rate associated with the first quantization step, as mentioned above. Independent claims 4, 9 and 10, and dependent claims 2 and 5 are rejected for the same reasons as independent claim 1.

Dependent claims 3 and 6 are still objected to as containing allowable subject matter. The prior art does not disclose, teach or suggest the limitation wherein said predictively encoded frames constitute a series of successive frames, the second selected frames being every other frame of said series. As illustrated in the applicant's figure 2B, the P' frame is the every other frame that alternates with the other frames (e.g. I or P), and clearly, neither Tanaka nor Kim teaches the second selected frames being every other frame of the series of successive frames.

In conclusion, since the broadly claimed limitations are met by the teachings, the rejection of claims 1, 2, 4, 5, 9 and 10 is maintained.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1, 2, 4, 5, and 9-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka (5,144,426).

Regarding claims 1, 4, 9 and 10, Tanaka discloses an arrangement and method of compressing a video signal (fig.3 is an encoding method and arrangement for compressing a video signal 101), the arrangement and method comprising:

predictively encoding (fig.3, elements 111 and 113) frames (fig.3, 101 are input video frames of video signal) of said video signal with reference to a prediction frame (fig.3, element 110);

calculating a quantization parameter for each encoded frame (fig.3, elements 118 and 122 calculates a quantization step size or parameter for each encoded frame),

quantizing the encoded frames in accordance with said quantization parameter (fig.3, element 115),

characterized in that said step of calculating the quantization parameter includes calculating a first quantization parameter (fig.3, element 122) representing a first quality or bit rate for quantizing selected first frames of said predictively encoded frames (col.15, ln.40-41; note the Qb is the first quality for quantization of selected first frames), and a second quantization parameter (fig.3, element 118) representing a second quality

or bit rate that is lower than said first quality or bit rate for quantizing selected second frames of the video signal (col.15, ln.40-53; note Qstep is the second quality for quantization of selected second frames and that, on lines 43-48, the second quality Qstep is lower than the first quality Qb because the first quality Qb is multiplied by a factor 1/4 , ½ or 3/4 , thus making the second quality Qstep smaller or lower than the first quality Qb), the method further including:

decompressing (fig.3, element 126 is the local decoder or decompressor) the compressed second frames to constitute the prediction frame (fig.3, 110) for predictively encoding the first frames.

Regarding claims 2 and 5, Tanaka discloses an arrangement and method as claimed in claims 1 and 4, wherein the step of calculating the second quantization parameter includes calculating said first quantization parameter and multiplying said first quantization parameter by a given factor (col.15, ln.40-53; note Qb is the first quality for quantization of selected first frames and Qstep is the second quality for quantization of selected second frames and that, on line 44, the second quality Qstep is lower than the first quality Qb because the first quality Qb is multiplied by a factor 1/4, thus making the second quality Qstep smaller or lower than the first quality Qb).

Allowable Subject Matter

3. Claims 3 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Tanaka discloses a motion compensated prediction interframe coding system. Kim discloses an adaptive quantizer with modification of high frequency coefficients. The prior art does not disclose, teach or suggest the limitation wherein said predictively encoded frames constitute a series of successive frames, the second selected frames being every other frame of said series. As illustrated in the applicant's figure 2B, the P' frame is the every other frame that alternates with the other frames (e.g. I or P), and clearly, neither Tanaka nor Kim teaches the second selected frames being every other frame of the series of successive frames.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

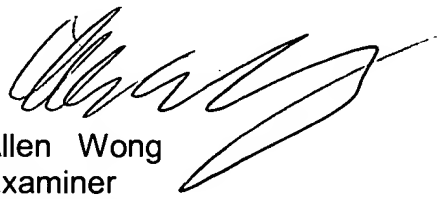
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen Wong whose telephone number is (703) 306-5978. The examiner can normally be reached on Mondays to Thursdays from 8am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Allen Wong
Examiner
Art Unit 2613

AW
3/2/05